Small Business Innovation Research

Rectangular-Area 3D Locking Sprag

Honeybee Robotics, Ltd. New York, NY



INNOVATION

Developed Rectangular Area Contact 3D Locking Sprag (RACLS) that reduces the contact stress in conventional 3D sprag-locking mechanisms between the sprag and the inner and outer race, thus allowing for greater loading capability and/or lower wear rate of the components.

ACCOMPLISHMENTS

- Reduced the contract stress in conventional 3D spraglocking mechanisms between the sprag and the inner and outer race, thus allowing for greater loading capability and/or lower wear rate of the components.
- This technology could provide a new generation of brakes, clutches and other locking mechanisms that can withstand higher loads, thus extending their possible applications.

COMMERCIALIZATION

- A licensing agreement has been signed with Spragtech, LLC in order for them to utilize our Patent #5,518,094 for the Clutch/Brake Having Rectangular-Area-Contact 3D Locking Sprag.
- Spragtech will use this technology in the development and marketing of three-dimensional sprags for two specific applications: hand tools and bicycles.
- Discussions are being held with Avid Technology regarding the utilization of these sprags for their line of mountain bikes.
- Spragtech is in the process of concluding marketing agreements with several large hand tool manufactures.

Goddard Space Flight Center



3D SPLIT-LOCKING SPRAG

GOVERNMENT SCIENCE/APPLICATIONS

 Spragtech is an intellectual property company established to facilitate the transfer of technology developed by NASA for commercial use.

Points of Contact:

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